ELIET®

MANUAL

Major

You will find information about the actual use and maintenance of the machine. **Read it carefully and keep it in a safe place.**

Please also keep your **purchasing invoice** or the proof of receipt together with this booklet.

Register your product online at **www.eliet.eu**

Attention: When putting a new machine into operation you must check the tension of all blade bolts during the first five working hours. Should this warning not be headed, a blade may become loose. Serious consequential damage may occur in relation to your new machine and the operator may be in grave danger of suffering injuries or death may even be the result. ELIET can, as a consequence, not be held liable for the consequences of this negligence. Any claims on the warranty will also no longer apply.

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1. Introduction

1.1 Read the operating instructions

Eliet machines have been designed for safe and reliable use as long as they are operated in accordance with the instructions described. Carefully read the operating instructions before using the machine. Failure to do so can result in personal injury or damage to the equipment.

1.2 Identification details – ELIET MAJOR

Note the identification details of your machine in the space provided

Article number:	MA
Serial number:	
Year of construction:	20

2. Warranty

2.1 Warranty card

In order to lay claim on the guarantee, the completed guarantee card should be sent to the address below with in one month of purchase:
ELIET EUROPE NV, Diesveldstraat 2, B – 8553 Otegem (België)
Tel. +32 56 77 70 88 - Fax +32 56 77 52 13

REGISTER YOUR PRODUCT ONLINE AT WWW.ELIET.EU.
Read the warranty conditions on the attached warranty card.

For your information :
Technical problems or faults due to faulty maintenance mean that the customer will not be entitled in any way to make a claim on the warranty. Chapter 11 shows in a well-organised manner the maintenance intervals and provides advice for the maintenance type for which an official dealer should be consulted.

3. Welcome

Welcome to the family of ELIET customers.

We would like to thank you for the confidence that you have placed in ELIET and we are convinced that you have purchased the very best machine. The operating life of your ELIET machine depends to a great extent on how you care for your machine. If you follow the instructions and suggestions in these manuals, your ELIET machine will operate for a very long time in optimal condition.

Read this instruction manual carefully before operating this machine. This will prevent you from operating the device incorrectly. For your own safety, take into account the safety instructions specified in the relevant chapter. Even if you are thoroughly familiar with operating such equipment, it is still advisable to read these pages carefully.

At ELIET all our machines and devices are subjected to a policy of continuous change and therefore, the specification of your machine may differ slightly in terms of shape, technology and accessories. The descriptions and technical data in this manual are accurate at the time of printing. Certain illustrations and descriptions may not be applicable to your specific machine, but instead relate to a different version of the machine. In turn, we trust that you will understand that the texts and illustrations in this manual cannot lead to any claims. If you still have any questions after you have read this manual, please contact your ELIET dealer. Find an official ELIET dealer near you at **www.eliet.eu**.

ELIET AT YOUR SERVICE

During office hours our help desk will make every effort to answer your questions :

European customers
GMT +1: van 8.00 AM tot 18.00 PM
Tel: +32 56 77 70 88
Fax: +32 56 77 52 13
Service@eliet.be

US customers
Ph (+001) 412 367 5185
Fax (+001) 412 774 1970
usinfo@elietusa.com
www.elietusa.com

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5. Operator safety warnings

ELIET cannot foresee every situation in which a risk or danger can occur. The warnings in this user manual, the labels on the machine are therefore, not comprehensive. Even though this will be minimal, a residue risk will always be present. If you apply a working method, action or technique as the user that is not explicitly recommended by ELIET, ensure in any case that this will not represent a danger for bystanders.

A number of symbols (“For your information”, “Caution”, “Warning”) are used in this user manual to provide additional information and to highlight dangers.

5.1 For your information

For your information:
This symbol is used to draw your attention to specific information and/or actions, or to denote where you can find additional information relating to the subject.

5.2 Caution

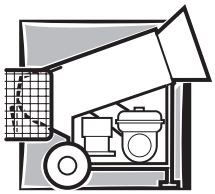
Caution:
This notice identifies safe usage habits. This is done to prevent incorrect actions that can result in personal injury or damage to the machine.

5.3 Warning

Warning
This notice is used to warn you about extreme danger that you must be aware of in these specific circumstances. Thus remain alert, in order to ensure your own safety.

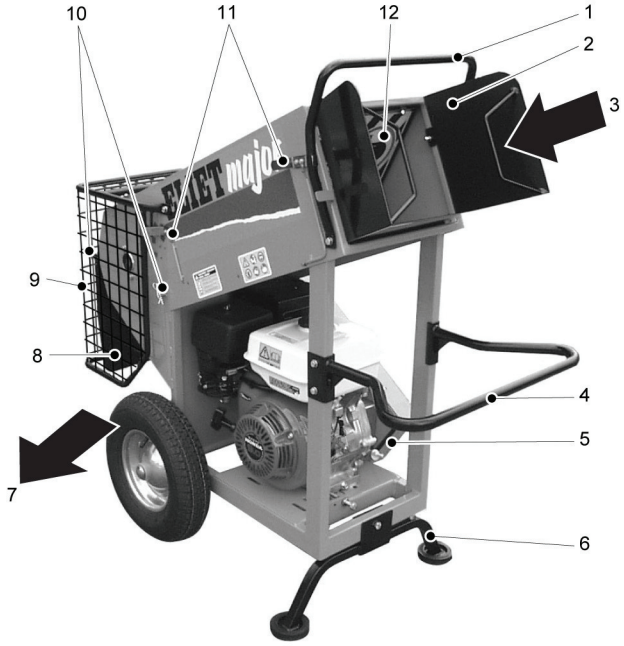
These safety measures can only warn and not remove the danger. Using common sense and observing the guidelines contained in this manual are essential to prevent accidents.

6. Main parts



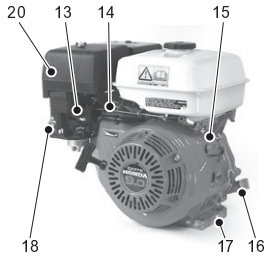
To fully understand the content of this operator's manual you need to be fully conversant with the terminology used for the descriptions. In this chapter you can find a set of parts identified by name. It is a good idea to take time to study the machine beforehand for an improved understanding of the descriptions provided in this user manual.

6.1. Machine Survey

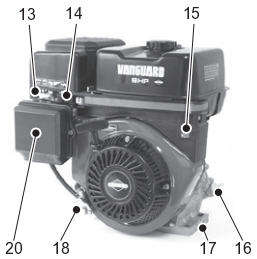


1) Emergency lever
2) Input hopper
3) Input
4) Steering handle
5) Drive guard
6) Balance base
7) Output
8) Splash guard on output
9) Safety net
10) Sliding spindles for removal of screen
11) Safety switch
12) Safety shield

6.2 Engines



HONDA
GX270 (9 HP)



BRIGGS & STRATTON
VANGUARD (9 HP)

13) Choke
14) Speed adjustment
15) ON/OFF switch
16) Oil filler cap / dip stick
17) Oil drain plug
18) Petrol tap
19) Electric motor
20) Air filter

For your information:
If the manual refers to the terms in front, behind, left and reight, then this is always as viewed by the operator standing at the machine input.

For your information:
Your ELIET dealer is at your service, ready to provide you with maintenance or advice so that your ELIET machine always remains in optimal condition. Original ELIET parts and lubricants can be obtained from your ELIET dealer. These service parts are manufactured to the same stringent accuracy requirements and standard of craftsmanship as the original equipment. (Find your nearest dealer by visiting **www.eliet.eu**.)

Caution:
For you own safety, only genuine service parts should be installed on ELIET machines. (Find your nearest dealer by visiting **www.eliet.eu**.)

7 . Safety instructions

7.1 Safety messages

Safety stickers or relief images have been affixed on to visible areas of the machine. Make a note of the icons and warning messages specified on these stickers.

GEVAAR DANGER
GEFAHR
• Houdt handen en voeten op veilige afstand.
• Eloigner pieds et mains • Remove hand and feet.
• Bitte Hände und Füsse fernhalten.
ELIET

This sticker is attached to the safety net and warns against the danger of injury to hands. The screen on the shredding chamber should only be opened once the knives have come to a complete standstill. The motor should always be switched off before lifting the safety net.

This sticker is attached to the drive belt guard. The sticker points out the danger which can occur if the guard is removed while the motor is rotating. Never operate the machine if the guard is not in place.

This sticker is attached to the side of the machine. It provides a summary of the general safety regulations by using icons:

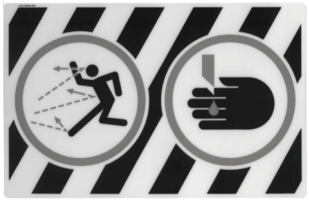
1. Before operating the machines the manual should be read and understood.
2. Suitable safety clothing (gloves, safety glasses, ear defenders) should be worn when operating the machine.
3. Operating or carrying out maintenance on the machine presents the risk of injury to hands. Be alert and careful.

WAARSCHUWING ! AVERTISSEMENT !
WARNING ! WARNUNG !
• Stop de motor en demonteer de bougiekabel voor u aan de machine gaat werken.
• Arrêter le moteur et enlever le cable de la bougie avant de travailler sur la machine.
• Stop the motor and remove the spark plug before working on the machine.
• Bitte vor Nachprüfung der Maschine Motor abstellen und Zündkerzenstecker abziehen.
ELIET

This sticker is attached tot he machine at engine height. This sticker reminds the operator to switch off the engine and release the spark plug cap before carrying out maintenance on the machine.

NL AANDACHT!
VERBODEN MET DE HANDEN VOORBIJ HET VEILIGHEIDSSCHILD TE KOMEN !
F ATTENTION!
NE JAMAIS METTRE LES MAINS AU-DELÀ DU DISPOSITIF ANTI-RETOUR !
GB CAUTION!
KEEP HANDS AWAY FROM ANTI-PROJECTION DEFLECTOR !
D ACHTUNG!
ES IST VERBOTEN, MIT DEN HÄNDEN HINTER DEN INNEREN SHUTZSCHILD ZU GREIFEN !

This sticker is attached in the input opening. The sticker emphatically points out the risk of injury to hands which is inherent in wood shredding. The sticker reminds the operator how to operate the shredder in the safest possible way. It is prohibited to insert your hands beyond the safety shield!



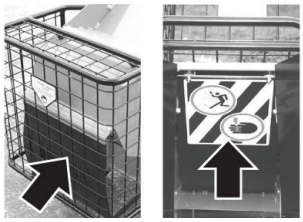
This sticker is attached to the safety shield. Once the safety shield is lifted the risk of cuts and injury due to flying wood chips becomes very real. This very visual sticker aims to drag your attention to these hazards.

Caution:
For your safety, use only genuine ELIET parts on ELIET machines. The list of original replacement parts and their ordering code can be consulted online by visiting **www.eliet.eu**.

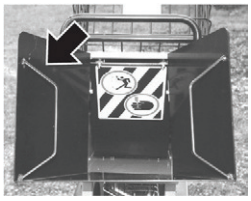
7.2 Safety provisions

Emergency lever:
This lever is located around the input opening. By pushing this lever backwards, the engine is switched OFF.

Safety net:
This net encloses the rear of the machine. When the net is raised, the engine is switched OFF. This net prevents you from inserting your hands into the rotating blades.



Safety shields:
First of all the machine is equipped with a steel plate located in the input opening. Its function is to protect the operator against flying wood chips. It is strictly forbidden for the operator to insert his hands beyond this steel plate. Secondly, the machine features a rubber protective flap at the rear of the machine. This serves to slow down flying chips.



Input Hopper:
This hopper is fitted on the input opening in the direction of the operator. If the operator was to ignore the warning and insert his hands beyond the protective plate, then this hopper would restrict the access to the shredding chamber to the extent that injury caused by the blades along the input opening is virtually impossible.

Belt guard:
The guard ensures that the rotating parts which could cause injury are sufficiently guarded.

Safety kit:
With regard to your safety ELIET strongly recommends the use of the supplied safety kit. This kit consist of safety glasses, ear defenders and a pair of working gloves.

7.3 Safety instructions

7.3.1 General safety instructions

- The Owner Manual must stay with the unit during its complete service life. It serves as a reference for the user, and enables the machine to be used and maintained in accordance with the correct instructions. Always refer to this instruction manual if you have any doubts about an action that you are about to perform.
- If the instructions stated in this manual are not clear to you, do not hesitate to contact your Eliet dealer for further explanation. In addition, the ELIET help desk is at your service during office hours to answer any queries you may have: (EU +32 56 77 70 88).
- Read the chapter meant for the dealer (see : Chapter 8) and immediately verify whether the machine has been delivered in accordance with the instructions.
- After you purchase the machine, allow the dealer or a professional to give you some instruction regarding the correct use.
- Carefully observe all safety instructions when using the ELIET machine ! Carefully read all the instructions relating to the use of the machine. All these instructions relate to your personal safety.
- Always observe the applicable regulations of the Labour Inspectorate to avoid accidents.
- Read and observe all safety messages posted on the machine in the form of stickers or icons.
- Under no conditions whatsoever may the original design of the machine be modified without written consent of ELIET EUROPE NV (Belgium).

7.3.2 Careful and security-conscious use

- This machine is designed solely for chipping branches material, prunings, leaves and all kinds of organic garden debris. Any use other than the designated operation is at the risk and responsibility of the operator.
- As chipping involves ongoing considerable physical effort, take regular breaks for food intake, rest and drinking.
- It is unsafe for persons suffering heart problems and/or having balance disturbances to operate the machine.
- Think about what you are doing whenever you operate the machine. Do not be tempted to let routine dull your attention. Never act impulsively or in reflex.
- Despite the extensive safety features, do not seek out dangerous situations. (Annex 7 contains an indicative list of dangers. Please read it.)
- Never work with a machine that has not been fully assembled. Check the finish of the machine to ensure compliance with the instructions provided in this manual.
- You must never use the machine without a feeding hopper.
- Never use the chipper when the wheels have not been mounted.
- Never use a step when feeding garden waste into the machine.
- Do not constantly feed thick branches with a maximum diameter of 55 mm into the machine. It applies as a guideline that a maximum of 10% of the material to be processed may have a branch thickness that is larger than 50 mm.
- Never attempt to shred branches that are frozen.
- Burning objects must never been inserted into the machine (for example, a cigarette or charcoal).

- Do not feed foreign materials. (Strings, stones, metal, plastic, textile, etc.)
- For deontological reasons, Eliet accept no responsibility whatsoever for any accidental injury to pets or persons caused by its machines.
- You must never use metal tools to push garden waste into the loading hopper.
- Take care to preclude any tools falling into the in-feed funnel.
- Never work in conditions where light intensity is less than 500 Lux.
- Always work on a stable and flat surface.
- Never use the machine when it is on a gradient.
- Never use the machine when it is raining and avoid water directly falling on the machine that is being supplied by power.
- Avoid electrocution : Never perform any actions or work with the machine when your feet are in water or when your hands or feet are wet.
- Never attempt to change a machine setting and never perform maintenance when the motor is running.
- The machine may cause an explosion when you work near flammable products, fumes, etc.

7.3.3 Responsibilities of the Operator

- All persons using the machine are assumed to be fully conversant with the safety instructions. **The operator is fully liable for the use of the machine in regard to himself and to third parties.**
- It is assumed that the operator of this machine is mature enough and has enough common sense to make decisions by himself.
- Underage persons must not operate the machine. However, this does not apply to youths above the age of 16 years, who are learning to operate the machine under the supervision of an experienced operator.
- A disabled person may only operate the machine when under the supervision of an experienced operator.
- Children (younger than 16 years of age) and animals must be kept well away (> 3 m) from the machine.
- ELIET recommend that the machine should not be lent to others. However, if this is done, only lend it to persons who are conversant with the machine. **Always ensure that the user is aware of the potential hazards, and ensure that he reads the manual before he uses the machine.**

(An indicative list of potential hazards can be found in Annex 7.)

- This machine must only be operated by persons who are in good physical condition. If you become tired during the work, take a rest in due time. Persons consuming alcohol or drugs must not operate this machine.
- The user must draw up a list that registers the number of hours worked. This will ensure that the repetitive maintenance schedule can be followed correctly in relation to the machine.

7.3.4 Personal Protective Equipment (PPE)

- You must wear suitable clothing to operate this machine. That is, clothing covering the whole body, heavy protective gloves and closed non-slip footwear.
- Do not wear loose fitting clothing (a shawl, for instance, should be avoided by all means). Long hair should be contained using a cap or a headband, or worn in a ponytail.

- For the protection of the most sensitive senses, Eliet recommends ear defenders and safety goggles.
- You must pay more attention and be more careful when wearing ear protection because noises that announce a danger (such as shouting, signal sounds) will only be heard to a limited degree.
- ELIET do not recommend using a Walk man or a portable MP3 player whilst working.
- Chipping may result in dust production. If this dust irritates your lungs, we recommend that you wear a dust mask in accordance with the following standard: directive 89/686/EC.

7.3.5 Danger zone

- During the work, do not allow bystanders to enter the risk zone that stretches up to 3 m around the machine.
- By preference, the operator should stand at the back of the hopper if he or she wishes to deposit green waste in the hopper. Do not bend over the feed hopper. This will ensure you remain outside the projection field of chips that may possible fly out through the anti-projection flaps.
- Contact with moving parts may cause injury or damage. Ensure, therefore, that hands, feet or loose clothing are well away from moving parts.
- You must only operate the machine when it is in its normal working condition.
- The machine must not be tilted to reduce the standard feed-in height when chipping.
- Do not take any risks and immediately stop the machine as soon as anyone enters the danger area. (Read section 9.3.2, Switching off the motor.)
- Children and animals must be kept well away from the machine.
- When leaving the machine, the motor must be switched off.
- Once the motor is running, focus all your attention on operating the machine.

7.3.6 Periodic maintenance

- Periodic maintenance is essential. For this reason, strictly follow the maintenance schedule in this user manual
- Draw up a maintenance register in which you keep the performed maintenance updated in detail.
- The blades must be checked to determine their sharpness to ensure the good operation of your machine. Sharpen the blades on time.
- Always check the blade bolts for tightness within a run-in period of 5 hours after installing new blades or reversing used blades. This also applies to the first 5 hours when the machine is put into operation.
- Regularly cleaning the machine is essential.
- When parts must be renewed as a result of wear or failure, you must always request genuine ELIET service parts from your ELIET dealer. This is important in the interests of your own safety. (Find an official ELIET dealer near you by visiting .)
- The list of original replacement parts and their ordering code can be consulted online by visiting www.eliet.eu
- Always ensure the motor is switched off and the plug disconnected before performing repairs or maintenance. Always wait until the blades come to a complete standstill before carrying out any operation.
- Always wear suitable clothing for performing maintenance.

Use the machine in an environmentally friendly way:

- Do not leave the machine on when it is not being used.

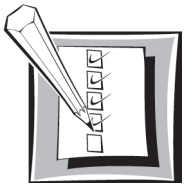
- Do not waste petrol during refuelling.
- Service the motor on a regular basis in order to maintain constant combustion.

7.3.7 Guidelines related to the electric machines

On machines powered by an electric motor, the following guidelines must be observed as well:

- The machine may only be connected to an earthed circuit.
- The circuit must be protected by a RCD (Residual Current Device) with a minimum sensitivity of 30.mA
- If connection is to be made to a socket which is located outside, this socket must conform to IP65.
- The machine must not be operated during rainy weather.

8. Dealer preparation



Warning :
As an ELIET dealer you **must** familiarize your customers with the **functioning of the machine** and also **point out the possible dangers** while using it. You are expected to carefully go over the maintenance points of the machine together with the new owner. Repeat these instructions until the new owner has fully understood everything.

Warning :
The manufacturer, ELIET wish to re-emphasise that the Dealer must expressly point out to the customers that they must examinethe bolts which retain the chipping blades for security of fixings **within the first 5 operating hours**.

ALL BLADE BOLTS MUST BE TIGHTENED CORRECTLY AFTER THE FIRST 5 OPERATING HOURS DUE TO SAFETY CONSIDERATIONS. (TIGHTENING TORQUE : 10 NM.)

Ignoring this operation may cause serious injury and may even lead to death. In addition to damaging the machine, the client shall loose all entitlement to make a claim on the warranty. See the list with tightening torques in the annex.

- ELIET machines are packaged in accordance with common rules that apply for such transportation. Deliveries will always be ex factory. ELIET cannot, therefore, be held liable for damages that occur during transportation.
- Should you notice damage to the packaging when goods are accepted, always check the state of the machine to ensure it is not damaged. Report any deviation on the delivery order before signing off for receipt.
- Should the machine be damaged, you should always immediately submit a complaint to the shipping company.

When the machine has been removed from its packaging, it is still not completely assembled. The dealer must finish the assembly. Below we provide a few guidelines :

- First, the steering handle is installed. This is secured in the holes provided by two M6 bolts. (use a 10mm ring spanner)
- The hopper at the front of the input opening is unfolded and secured with the 2 M6 bolts, pinions and nuts respectively.
- The wheels are slid onto the wheel shafts. Some lubricating grease (Sunoco Multipurpose LR-EP2) may be applied to the roller bearings beforehand. Finally, the wheels on the shafts are locked using the starlock caps supplied.
- The dealer adjusts the belt tension in accordance with the description in the maintenance section of this instruction manual. Each ELIET-dealer is responsible for the long operating life of the ELIET machine. He will lubricate all hinge points of the machine again before delivering the machine to the customer.
- The machine is packed without oil or petrol. The dealer will apply these in accordance with the instructions in this manual (or the instructions in the engine manual).
- For petrol engines, the engine speed is set at 3200 rpm.
- The dealer performs a test run on the machine and checks that everything works correctly (for example.: Safety net, emergency stop,...).
- Finally the dealer ensures the guarantee card is completed and signed in order to avoid disputes in any warranty cases. Please refer to the guarantee conditions for further information.

Caution:
In the case of a petrol engine, the dealer will pay particular attention to the corect adjuistment of the speed of the machine. If the speed has been set too high, this will cause additional vibration which in turn will cause increaded wear in due course. If the speed has been set too low, the machine will loose power.

9. Operating instructions

9.1 Preliminary checks

Caution:
Before using the machine, it is recommended to make a habit of checking the following points.

Checklist

1. Satisfy yourself that the chipping blades are firmly in place and in good condition. For safety's sake, tighten the blade bolts. (SW 10) (See the list with the tightening torque for bolts in annex 6). If the blades need sharpening, this should be performed first. Check the blades and the blade holder for cracks and nicks and replace immediately as needed (see § 11.4.3, Reversing and replacing blades).
2. Check whether there is sufficient oil in the machine. To this end, remove the dipstick and check the oil level has not dropped below the minimum level. (See if necessary §11.4.2 Checking the oil level in the engine).
3. Check beforehand whether the fuel tank is completely full. If this is not the case, it should be topped up with fuel (see §9.2 Refuelling).
4. Check the level of contamination in the air filter (see if necessary §11.4.3 Cleaning the air filter).
5. Check whether the screen at the rear of the machine is secure, and has been fastened correctly.
6. Check whether the belt is still sufficiently tensioned (see §11.4.5 Checking the belt tension). If not, this can be adjusted (see §11.5.5 Adjusting the belt tension).
7. Before using the machine, check whether all guards are in position and whether they have been correctly secured.
8. Check whether all safety provisions on the machine still operate.
9. Check whether all safety precautions on the machine are still functioning (see §7.2 Safety precautions)

Once these items have been checked and approved, you can prepare the area of operation (see Chapter 9.3) and move the machine to the work site.

9.2 Refuelling

When there is insufficient petrol in the machine it must be filled up. It is advisable to always use fresh petrol. Preferably unleaded petrol with 98 or 99 octane should be used.

Warning:
Under certain conditions, petrol is extremely flammable and explosive. Fire and explosions caused by petrol can result in serious burns or damage to property. The following points should therefore be taken into consideration:

- Topping up with petrol should never take place while the engine is rotating.
- Always allow the engine to cool off for a few minutes before topping up with fuel.
- Only use fresh petrol.
- For environmental reasons, ELIET recommends the use of unleaded petrol. Additives may be added in order to extend the freshness life.
- Store petrol in an approved tank. Keep this tank out of reach of children.
- Never top up with petrol in a place where work will be carried out later. Keep a distance of at least 10 metres away from a chosen working area. This to prevent any fire risk.
- Clean the area around the fuel tank cap and remove it. Do not fill the tank up completely. Fill it up till the fuel is about 10mm away from the top edge. In other words, do not fill the tank right up to the opening.
- Always use a funnel or spout to pour the petrol into the tank. Suitable funnels can be obtained from your ELIET dealer.
- Replace the cap on the tank as soon as possible. If petrol is spilt during filling, the engine must be cleaned immediately.
- Also, ensure clothing does not come into contact with petrol. If this does happen, clothing should be changed immediately.
- It is unsafe and therefore expressly forbidden to fill the tank in the vicinity of smokers or a naked flame.
- A doctor should be consulted immediately if fuel is swallowed or comes into contact with eyes.

9.3 Preparing the work site

- Clear the area first where the machine is to be used.
- In addition, the paths along which the plant trimmings are removed, must be kept clear, thus releasing you from the worries of tripping up over them. Also ensure your safety is not compromised.
- On slopes, never operate the machine (no forward, backward or lateral slope.).
- The material to be chipped is to be sorted beforehand. In this way, you can be sure that no foreign objects will enter the machine with the material to be chipped.
- Foreign objects are defined as : Any non-organic object or branchy material in excess of the stated capacity (such as metal, stone, plastic, PVC, cords,...). Some of this can cause serious damage to your machine or can be ejected, virtually as projectiles towards the user.

For your information:
As the chips fall down , it can be useful to place a plastic under the machine. This makes cleaning up after work a lot easier

9.4 Starting the engine

Caution:
Never start the machine if there is dust or dirt on the engine or between the cooling fins of the engine This prevents optimal cooling of the engine and more importantly can cause fire.

Warning:
The drive shaft for the blades is directly driven by the engine. The blades cannot be disengaged. The machine is therefore dangerous as soon as the engine is running. Consequently, the engine must be switched OFF immediately if a situation occurs where a person looses control of the work. How to switch the machine off quickly:

1. By pushing the emergency stop lever backwards, the engine is switched OFF.
2. The engine can be switched off using the stop switch or the rotary knob.
3. By raising the safety net, the engine is also switched OFF.

- Always ensure that all chippings have been removed from the chipping chamber before starting the machine. If required, empty the chipping chamber.
- Ensure the feed hopper is empty (no garden waste, no tools, etc).
- It should be noted that the engine can only be started if the emergency stop lever and the safety net are in the correct position.

9.4.1 Petrol engine

For your information:
The starting procedure for the engine can vary slightly from one engine make to another. Please also refer to the engine manual. The ‘General’ chapter in §6. Main parts shows various types.

Before starting the engine, check whether there is sufficient oil and fuel in the engine, if this has not already been checked previously.

For the inspection and replenishment of the oil level please refer to §11.4.2 Checking the oil level in the engine.
For filling up with petrol please refer to §9.2 Refuelling.

- If the petrol tank is equipped with a fuel shut-off valve, ensure that this is in the OPEN position.
- Depending on the type of engine, move the lever, or turn the knob to the ON position.
- Move the choke lever to CLOSE.
- Move the throttle (control lever) to full throttle, which is represented by the illustration of a hare.

Warning:
Before starting up the machine, be sure to wear the supplied ear defenders.

- Start the engine by pulling strongly on the starter cord.
- Once the engine is running, quickly move the choke lever to OPEN. This to prevent the engine being flooded with petrol. If this action is omitted, the motor will slow down and will start to smoke fiercely. Eventually, it will stop. Simply restart the engine without using the choke.
- If the engine cannot be restarted, it will be because the spark plug is covered in grease and it should be cleaned or replaced (see §11.5.2 Checking or changing the spark plug)

9.4.2 Electric motor

- It is forbidden to use the machine during rainy weather.
- The extension cable to be used should be earthed.
- Ensure the machine is not too far away from the wall socket. If the extension cable is too long, this will result in considerable resistance with a corresponding loss in power.
- Check whether the red knob on the machine is depressed so that the engine will not start automatically once the power has been switched on. To be on the safe side, first connect the extension cable to the machine before connecting the extension cable to mains supply. Ensure people are well away from the machine when the cable is connected to the mains supply.
- Before connecting the cable to the motor, make a loop with the cable around a tube on the machine frame. This to prevent the machine plug from being pulled out when the machine is moved.
- Start the motor by pressing the black button.
- Always allow the engine to run up to speed before inserting the wood to be shredded.

9.5 Stopping the Motor

RAISING SAFETY NET = ENGINE SWITCHED OFF

9.5.2 Petrol engine

- To stop the engine, move the throttle (control lever) or turn the knob to the OFF position.
- The machine can also be switched OFF by moving the emergency stop lever backwards.
- If fitted, close the fuel shut-off valve.

9.5.2 Electric motor

- The motor is switched off again using the red button.
- When the motor has cut out due to overloading, simply repeat the start up procedure. However, clear the shredding chamber first (read Chapter 9.6.3).

Caution:
Never pull the cord when disconnecting the plug. This would pull the cables from the cord from the connection clamps in the plug. A wire that has become loose represents a real danger of short circuit and electrocution. Therefore, always use the grip of the plug to pull it away.

9.6 Working with the machine

Caution:
As long as the engine has not completely stopped after it has been switched OFF, the blades continue to rotate. Consequently, do not perform any maintenance work whilst the blades are still rotating.

Warning:
Guards offer protection against rotating parts. When the engine is running, never place hands or other limbs behind these guards.

9.6.1 Prior to starting the work

Please note the following safety regulations before using the machine.

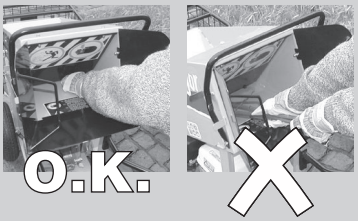
- The operator should wear the clothing, gloves and means of protection as stipulated in this manual (see §7.3 General safety regulations).
- A good gardener is well organised and plans his work. This will enable him to have an overview of the work and to avoid accidents and incorrect actions with the machine.

- The wood is systematically stacked before commencing the work : Thick branches, thin branches, leaves and damp products. Ensure that the material does not contain any foreign objects.
- Ensure the power supply cable is routed so that it does not hinder the feeding of wood to be chipped. And such in order to prevent the operator from stumbling.
- The motor must only be started once arrived at the work site.
- Never use a machine with a petrol engine in an enclosed area. This can cause poisoning as a result of engine fumes.

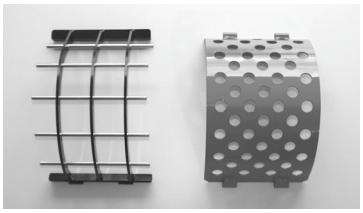
9.6.2 During the work

- When inserting the material, always hold it firmly. The wood is pulled into the machine by the rotation of the drive shaft for the blades and the teeth on the blades. If the operator does not continue to hold the wood firmly, it will automatically be pulled into the machine much too quickly which will inevitably lead to the machine jamming. The operator himself will therefore control the feed rate by feeding the wood in slower or faster. This feed rate will vary according to the thickness of the branch.
- The operator will listen attentively to the engine speed when feeding in the wood. If he notices that the speed of the engine drops significantly, he will immediately pull the wood back in order to allow the engine to speed up again.

Caution:
When feeding in wood, the operator must never insert his hands beyond the steel shield. By raising the plate, the operator removes his own protection against wood chips flying out of the machine.



- If mainly leaves or damp products are to be shredded using the standard screen, the openings can become blocked. As a solution to this problem ELIET offers a "screen for damp products". This screen can also be obtained from your ELIET dealer.
(art.nº. MA 003 001 001)



- When inserting branches, first the thickest end of the branch will have to be introduced into the feed hopper.
- As the chips fall onto the floor behind the machine, regularly check the pile of chips behind the machine is not obstructing the motor output or exhaust. Therefore either move the machine backwards in good time or tidy up the chips while the machine is working.
- If only a small volume of leaves is to be processed, they can easily be shredded using the standard screen. However, in this case, ELIET recommends that leaves and branches should be shredded alternately. The wood chips will prevent the screen openings from becoming blocked.
- The work should be halted immediately if strange noises are heard during the work. Stop the engine (using the emergency stop lever) and investigate the cause of the defect. Before pro-

ceeding, perform the necessary repairs.

- If the operator notices that, despite all preparations, a foreign object has still found its way into the machine, he immediately switches off the engine. He removes the foreign object and checks for any damage. In the event of damage, this is first repaired.
- In principle, the engine should switch itself OFF when the safety net is raised. If this is not the case because of a defect in the electrical circuit, the operator should switch the machine off immediately and not use it again until the defect has been corrected.

9.6.3 What to do about motor stalling

Motor stalling can be traced to overloading, overfeeding, discharge blockage or the power supply being down. You can very simply restart the chipper in these cases. Proceed as follows :

1. Check the petrol level in the petrol tank. (§9.2 Refuelling)
2. Remove all branches from the feed-in opening.
3. Pull the starter cord briefly. This will determine whether the drive shaft for the blades is still obstructed. Stop pulling as soon as you encounter resistance, and the cord cannot be pulled any further. There is no point in pulling hard on the cord, as this can only cause the cord to break or overload the starting mechanism.
4. If the drive shaft for the blades is stuck, the shredder housing should be emptied. To this end, open the screen. The screen is secured by two sliding pins. Remove the top sliding pin after removing the circlips. The screen can now be folded down.

Caution:
Always wear gloves when performing maintenance. You will be near the blades when emptying the chipping chamber. They are razor-sharp and, therefore, represent a real risk of leading to cutting injuries. Take care and try to avoid all contact.

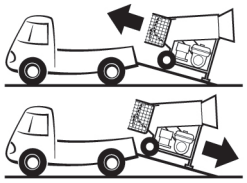
Warning:
If the machine topples over, petrol can leak out. In certain conditions petrol can be highly flammable and very explosive. Petrol fire and explosion can cause severe burns or damage to properties.

5. Remove all wood chips and debris from the shredding chamber. Carefully refit the screen and check whether this has been done correctly.
6. Lower the safety net and start up the shredder (as per the start up procedure described in §9.4 Starting the engine).
7. Perform the work more carefully in future in order to avoid jamming the machine.

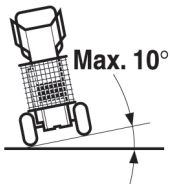
10. Transporting the machine

- Do allow only responsible adults move or transport the machine.
- In addition, do make sure children, persons untrained in the use of the machine or animals do not enter within 3 m radius when transporting the machine.
- If you wish to move the machine, always wait until the content of the chipping chamber has disappeared regardless of the quantity this may entail. Ensure the feed-in opening is free of branchy material.
- When moving the machine over greater distances (over 1 m), always take care to turn off the motor.
- If the machine is tipped over for whatever reason, turn it upright it as soon as possible. This prevents the oil in the crankcase from getting onto the air filter. As these filters are expensive, it is best to prevent this.
- Use anti-slip ramps when loading the machine in a van or on a trailer Ensure that these are well secured to the vehicle or trailer.
- Under no circumstances should the ramp slope exceed 25°.
- Never drive or put the machine on a surface that cannot support the machine and the person. (For your information : Take into account a net weight of 90 kg for the machine.)

- The drive shaft for the blades should be positioned in front when ascending a slope.
- The drive shaft for the blades should be positioned last when descending a slope.

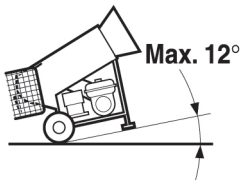


- Never use the machine for transporting objects or people.
- It is critical to judiciously select the traffic route in such a way as to release yourself from the worries of tripping up over some obstacles.
- Preferably, the transportation route is flat and even-surfaced.
- Ensure there is a sufficiently large run-out distance behind the ramps (4 m).
- Ensure the parking brake of the vehicle is on.
- Be careful and composed when loading and unloading the chipper so that the machine does not tip over and give rise to an accident.
- The maximum allowable sideways gradient for the shredder is 10°.
- Make sure to properly secure the machine to the vehicle during



transportation.

- During transport never tilt the shredder by more than 12° because this could cause the machine to topple over.
- Do not overload the vehicle. The chipper weighs approximately 90 kg net.



11. Maintenance

11.1 General

ELIET recommend that the machine should be brought to an official ELIET dealer for a major overhaul each year. (Find an authorized ELIET dealer near you by visiting www.eliet.eu.) Your ELIET dealer is always at your service for maintenance and advice. Your dealer will stock genuine ELIET service parts and lubricants. Your dealer's staff can always obtain advice and service from ELIET's help desk so that they can provide you with an impeccable after-sales service.

Caution:
Only use genuine ELIET replacement parts. These service parts are manufactured to the same strict quality control requirements and degree of craftsmanship as the original equipment. The list of original replacement parts and their ordering code can be consulted online by visiting **www.eliet.eu**.

Perform maintenance in a room intended for this purpose. This room must be

- Spacious
- Dust-free
- Easy access
- Clean and tidy
- Well lit
- Quiet

These characteristics are important to enable maintenance to be performed in an optimal manner.